

FROM PAPER TO ELECTRONIC RECORDS MANAGEMENT MANAGING THE TRANSITION

Library Technology Conference 2011
Macalester College
St. Paul, Minnesota

Presenter: Barbara E. Nye, CRM - Ictus Consulting, LLC

Managing the Transition

2

- Setting the Stage for Transition
- Managing the Transition
 - ▣ Leading Practices
 - ▣ Software Considerations
 - ▣ Storage Issues
- Conclusion

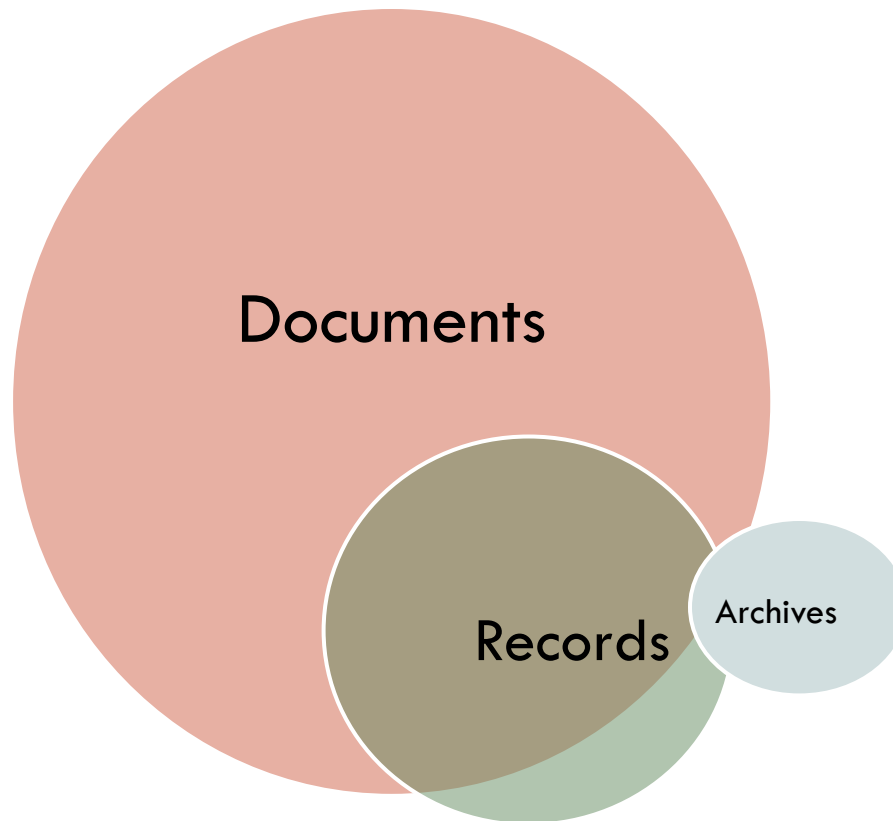
Setting the Stage

3

- Concepts and Definitions
- Records and Information Management
- Archives Management
- Electronic Records Management

Concepts

4



Definition of a Record (FRA)

5

- “... “records” includes all books, papers, maps, photographs, machine read-able materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them.” (44 USC 3301)

Definition of a Record (MN)

6

- “... “state record” means state and local records, including all cards, correspondence, discs, maps, memoranda, microfilms, papers, photographs, recordings, reports, tapes, writings, optical disks, and other data, information, or documentary material, regardless of physical form or characteristics, storage media or conditions of use, made or received by an officer or agency of the state and an officer or agency of a county, city, town, school district, municipal subdivision or corporation or other public authority or political entity within the state pursuant to state law or in connection with the transaction of public business by an officer or agency.”

(138.17 – 2010 Minnesota Statutes)

Definition of a Record

7

- Record – “Evidence”
 - ▣ Information created, received and maintained as evidence by an organization or person in pursuance of legal obligations or in the transaction of business (ISO 15489)
 - ▣ Contemporaneous evidence of a business transaction
 - ▣ “Adequate record” includes content, context, and structure

Record Formats

8

- Hardcopy (paper-based)
- Electronic (digital)
- Photographic
- Samples

Record Formats

9

- Hardcopy
 - ▣ Forms, maps, files, reports, engineering drawings, computer printouts, vellum, parchment
- Electronic
 - ▣ Computer files, email, voicemail, instant messages, electronic document images, audio and video recordings, electronic datasets, databases
- Photographic
 - ▣ Slides, motion picture film, filmstrips, aperture cards, microfilm, optical, negatives,
- Physical Samples (Supporting material to records)
 - ▣ Soil, water, tissue

R&IM Definition

10

- Records and Information Management
 - ▣ Systematic control of records throughout life cycle (ISO 15489)
 - ▣ Records Life Cycle from
 - Creation (or receipt) until
 - Disposition (destruction or long-term preservation as archives)
 - ▣ Promotes
 - Compliance
 - Accountability
 - Transparency

Archives Definitions

11

- Archives – “Memory”
 - ▣ Historical records or documents so preserved
 - ▣ A facility in which historical records are preserved and used.
 - ▣ T. R. Schellenberg
 - “Those records of any public or private institution which are adjudged worthy of permanent preservation for reference and research purposes and which have been deposited or have been selected for deposit in an archival institution.”

Archives Definitions

12

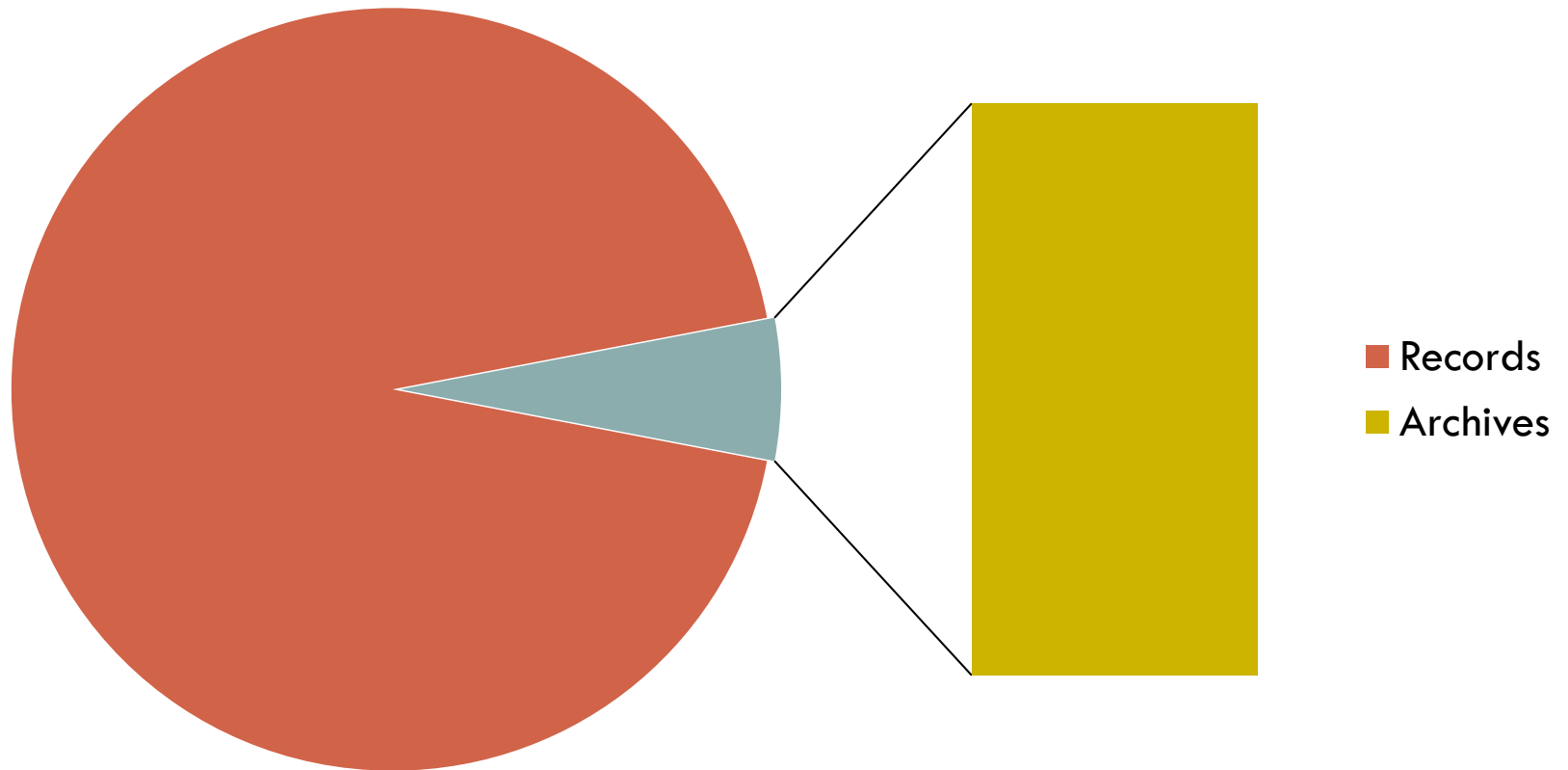
□ Archives Management

- ▣ Oversight of a program to appraise, acquire, arrange and describe, preserve, authenticate, and provide access to permanently valuable records.
- ▣ Distinguished from library, museum, and historical manuscripts traditions by the principles of provenance, original order, and collective control to preserve the materials' authenticity, context, and intellectual character.

Records and Archives

13

Relative Volume



Electronic Record Defined

14

- ▣ Numeric, graphic, or text information, that satisfies the definition of a record, and that is recorded on any medium capable of being read by a computer.
 - Magnetic tapes, magnetic disks
 - Optical disks
 - Electronic information systems, regardless of computer type
 - Information in email messages

Managing the Transition

15

- Setting the Stage ✓
- Managing the Transition
 - ▣ Leading Practices ←
 - ▣ Software Considerations
 - ▣ Storage Issues
- Q&A / Discussion

Transition

16

- Reasons to Make Transition
 - ▣ Technology Impact
 - ▣ Legislation
 - ▣ Case Law
 - ▣ Leading Practices

Transition - Technology

17

- Electronic records growth
 - ▣ 90% of records now “born digital”
 - ▣ 60% of records transmitted via email
 - ▣ 56% of records stored on “C:” drive
- How Much Information
 - ▣ 7.5 billion documents / day

Transition - Technology

18

- Electronic Records Challenges
 - ▣ Inadequate Controls
 - ▣ Information Redundancy
 - ▣ Unstructured Electronic Records
 - ▣ System Dependence
 - ▣ Media Stability
 - ▣ Transparent Arrangement
 - ▣ Remote Access
 - ▣ Total Cost of Ownership

Transition - Technology

19

- New Technologies
 - ▣ Text messaging, portable storage devices, social networking, etc.
- New Entrants
 - ▣ CA, IBM, Microsoft, Oracle
- Software Vendors Consolidate
 - ▣ Extempore ⇒ Optika ⇒ Stellent ⇒ Oracle
 - ▣ MDY ⇒ CA ⇒ Autonomy

Transition - Legislation

20

- ▣ Transparency – Sarbanes Oxley
- ▣ Privacy – HIPAA, GLB Act
- ▣ Economic Stimulus- ARRA, EHR Incentives
- ▣ Security - PATRIOT Act
- ▣ Finance – Dodd-Frank, Basel II
- ▣ Contracts - E-SIGN Act, UETA
- ▣ ESI Defined - FRCP (2006)
- ▣ Food/Drug ERM - FDA 21 CFR 11

Transition – Leading Practices

21

- Standards
- Risk Management
- E-Discovery
- Regulatory Compliance

Transition – Leading Practices

22

□ Standards / Guidelines

- ▣ DOD 5015.2 – ERM Design Criteria
- ▣ MoReq2 – Model Requirements ERM (Europe)
- ▣ EAD- Standard to describe archives, similar to MARC
- ▣ ISO 9000 – Quality Manufacturing records
- ▣ ISO 15489 – Records and Information Management
- ▣ ISO 23081 – Metadata in R&IM
- ▣ OAIS – Open Archival Information System
- ▣ VERS – Victoria Electronic Records System (Australia)
- ▣ Sedona Guidelines

Records Life Cycle

23

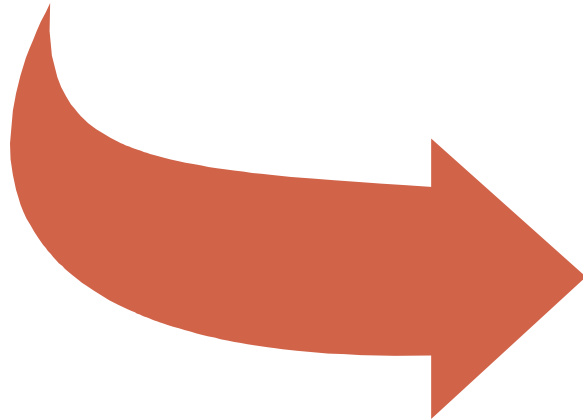
Create / Receive
Use

Maintain

Disposition

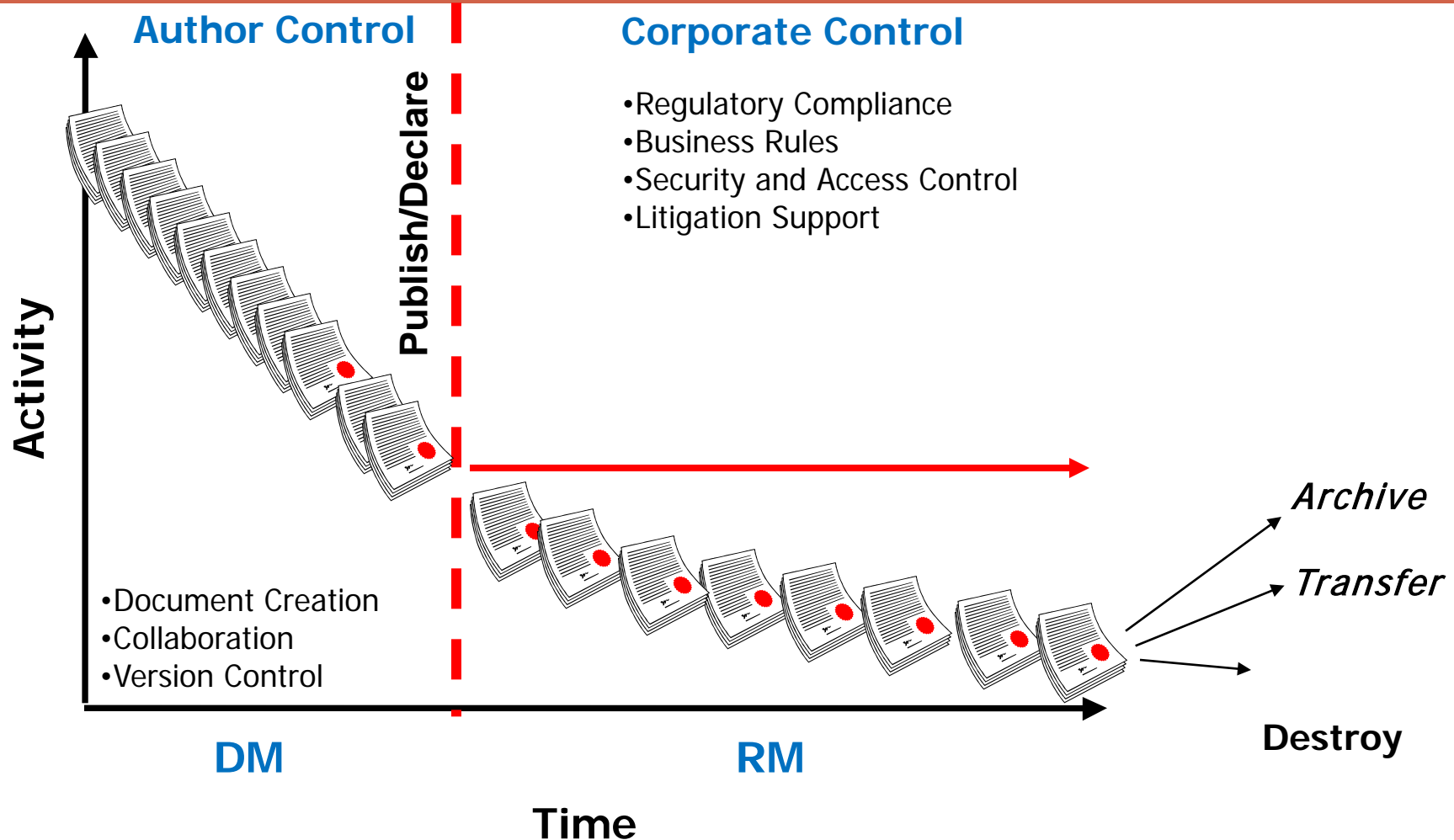


Destroy / Archive



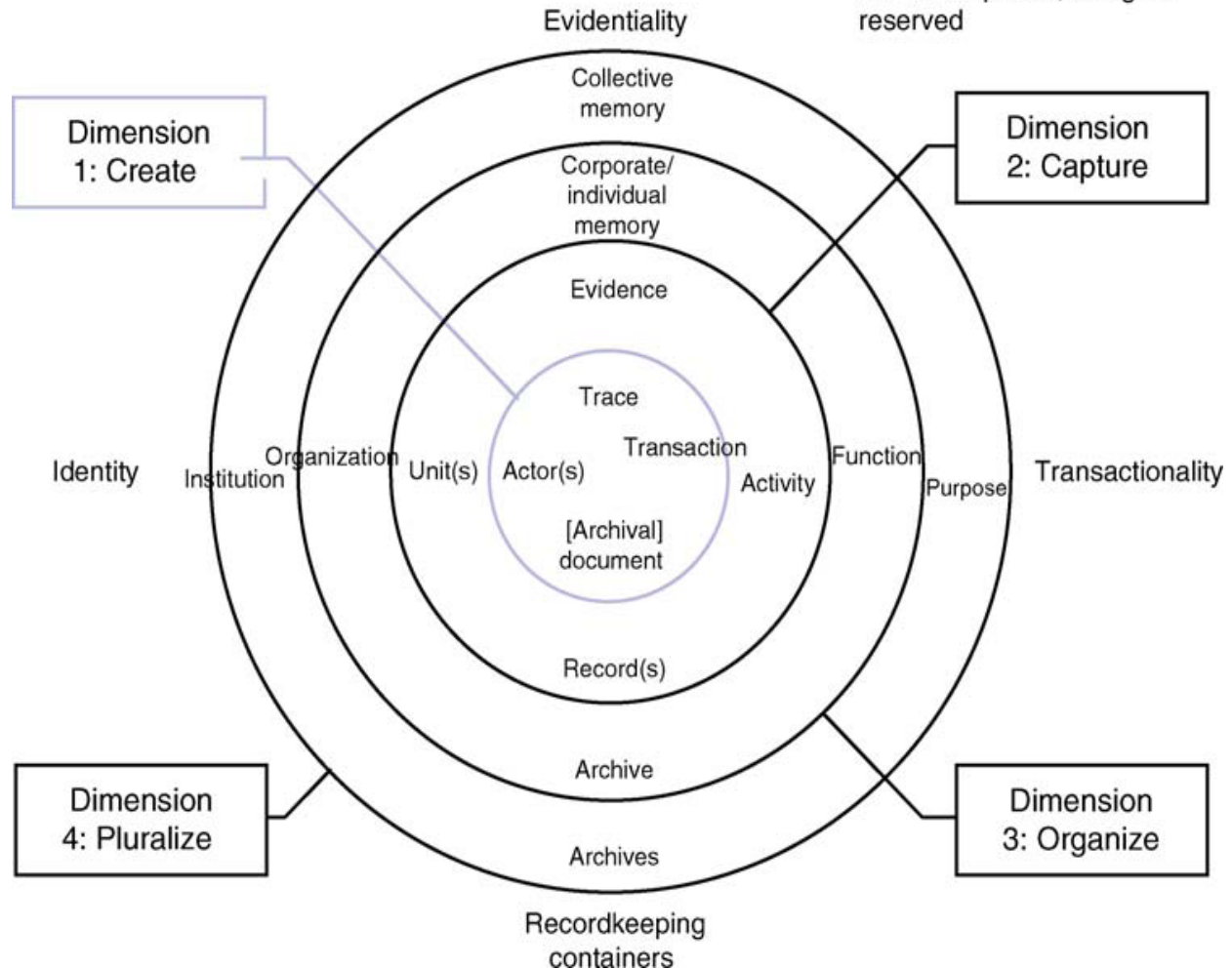
Document / Record Lifecycle

24



Records Continuum

25



Characteristics of a Record

26

- From ISO 15489
 - ▣ Content, Context, Structure
 - ▣ Authenticity
 - ▣ Reliability
 - ▣ Integrity
 - ▣ Useability

Leading Practices

27

- Paper Environment
 - ▣ Focus: Manage storage media

- Electronic Records Management
 - ▣ Focus: Manage content

Leading Practices

28

- Manage records in 5 environments
- Hardcopy Records Environment
 - ▣ Active Records - Workstation
 - ▣ Active Records – Business Unit Area
 - ▣ Inactive Records – Records Center
- Electronic Records Environment
 - ▣ IT-managed applications
 - ▣ Desktop applications

Leading Practices

29

- Change the way RM and AM work in order to meet challenges of changing records creation, use, maintenance, disposition.
 - Change focus
 - Acquire new tools, methodologies
 - Work closely with IT, Legal, Risk Management
 - Seize opportunities - proactive

Leading Practices

30

- ❑ Obsolete records destroyed
- ❑ Archival records managed
- ❑ Vital records protected
- ❑ Confidential records secure

Leading Practices

31

- Clear Policies
- Accountability
- Comprehensive Procedures
- Current Records Retention Schedule
- Routine “Compliance Days”
- Routine Compliance Reviews (Audits)
- Training

Managing the Transition

32

- Setting the Stage ✓
- Managing the Transition
 - ▣ Leading Practices ✓
 - ▣ Software Considerations ⇐
 - ▣ Storage Issues
- Q&A / Discussion

Software Considerations

33

- Electronic Records Management Systems
 - Records Management Systems
 - Imaging Systems
 - Electronic Document Management Systems
- Managing Electronic Records in Legacy Systems
 - Transactional Processing
 - Content Management
 - Enterprise Document Management
 - Enterprise Resource Planning
 - Decision Support
 - Email

ERMS

34

- Implement software with R&IM functionality
 - ▣ Capture and declare record and metadata
 - ▣ Support Classification
 - ▣ Support Audit Control
 - ▣ Ensure records are useable
 - ▣ Manage security and control
 - ▣ Support records preservation
 - ▣ Apply Legal Hold / Release
 - ▣ Enforce Retention

ERMS

35

- Move records from native application to be maintained as official records in ERMS

Legacy Systems

36

- Add R&IM Functionality to existing system
 - ▣ Capture
 - ▣ Classify
 - ▣ Audit
 - ▣ Retrieve (Use)
 - ▣ Secure / control
 - ▣ Hold / Release
 - ▣ Preserve
 - ▣ Disposition

Managing the Transition

37

- Setting the Stage ✓
- Managing the Transition
 - ▣ Leading Practices ✓
 - ▣ Software Considerations ✓
 - ▣ Storage Issues ↩
- Q&A / Discussion

Electronic Records Storage

38

- Storage Media
 - ▣ Magnetic
 - ▣ Optical
 - ▣ Solid State
- Storage Devices
 - ▣ Magnetic: Disks and Tapes
 - ▣ Optical Disks: CDs and DVDs, Memory Cards
 - ▣ Solid State: SDs, Memory Sticks, USBs

Electronic Records Storage

39

- Storage Location
 - ▣ Online, Nearline, Offline
 - ▣ Shared drive, network drive, C: drive, mainframe

Conclusion

40

- Electronic Records = Biggest Change
- Basic R&IM principles still apply

"Plus ça change..."

41

- *Let your Eminence give orders throughout each and every province that a public building be allocated, in which building the magistrate is to store the records, choosing someone to have custody over them so that they may remain uncorrupted and may be found quickly by those requiring them, and let there be among them an archives, and let that which has been neglected in the cities be corrected.*

-Emperor Justinian I (reigned 527 – 565 CE)

(quoted by Baldassare Bonifacio, *De Archivis*, 1632)

Managing the Transition

42

- Setting the Stage ✓
- Managing the Transition ✓
 - ▣ Leading Practices ✓
 - ▣ Software Considerations ✓
 - ▣ Storage Issues ✓
- Q&A / Discussion ↩

Discussion

43

□ And thank you!

Contact Information:

Barbara E. Nye, CRM
Ictus Consulting, LLC
50 W. Dayton Street – 207
Pasadena, CA
bnye@ictus.com
www.ictus.com
626.795.7117